NEW LAMPYRIDAE.

By H. C. Fall, Tyngsboro, Mass.

Having had occasion recently to make some determinations among our luminous Lampyrids, I was somewhat surprised to find that one of our commonest New England fireflies, or "lightning bugs" as they are usually called in the vernacular, appears to be without a name. This insect is briefly characterized below, and opportunity is taken to present descriptions of several other new species of *Photinus* and *Photuris* in my collection.

Photinus ignitus n. sp.

Very similar to consanguineus, and with this or with ardens it is generally mixed in collections. The form is more elongate than in the true consanguineus and with more narrowly explanate elytral margins. The color of the thorax is the same, but the elytra are generally of a paler fuscous tint. rarely if ever as dark as in fully colored consanguineus. The color of the ventral segments is substantially as described of typical consanguineus. The length in the series at hand varies from 6.8 to 9.5 mm.

The type is a male from Tyngsboro, Mass., and bears date 7-10-'08.

This is a common New England species, and I have seen specimens taken by Mr. Sherman at Peekskill, N. Y., and by Mr. Liebeck at or near Philadelphia. How much farther south it ranges I do not know.

Consanguineus was described in 1851, and the only locality given by Le Conte at that time was "Southern States." The specimen now on the name label in the Le Conte collection is one of a series of five from "W. Va.," and is probably not the original type. It, however, fits his original description and his later (1881) tabular diagnosis, and is probably identical with his original specimens. The original types of vittigera (3 exs. from Georgia) are present in the Le Conte series, and appear to have been correctly united with consanguineus by Le Conte in his later paper.

P. ardens, described from Lake Superior, agrees nearly with ignitus in its narrow form, but in it the disk of the thorax is occupied by a large dusky cloud, not at all or but faintly enlivened with the bright roseate spots so conspicuous in ignitus and consan-

quineus.

Photinus ablucens n. sp.

Rather broadly oblong elongate. Eyes small, scarcely larger in the male, separated on the front by about the combined length of the third and fourth antennal joints. Prothorax of the usual form, without subapical sinuations, hind angles not prominent, base broadly feebly emarginate; margins testaceous, a broad parallel entire fuscous stripe occupying rather more than the middle third, on either side an elongate orange red or yellow stripe terminated at base by a fuscous spot; the convex disk very finely punctate and neither carinate nor sulcate. Elytra dark fuscous with narrow sutural and broader lateral pale margins. Body beneath and legs entirely fuscous; light organs completely lacking in both sexes. Length 6.3 to 7.3 mm.

Described from 3 examples (2 3, 1 2) collected at Algonquin, Illinois, and sent me by Dr. Nason. The type is a male and bears date June, '08.

Except for the absence of light organs this interesting insect is in all respects of structure and appearance a typical Photinus, and rather closely resembles *ardens* in color. In all our other known species of the genus light organs are present except, according to Le Conte, in the female of *demissus*. There is perhaps a possible connection between the absence of light organs and the relatively small eyes, though in *demissus* the eyes are very large in the male.

Photinus granulatus n. sp.

Elongate, parallel; thorax obtusely rounded in front, sides subparallel behind, scarcely sinuate before the apex. Eyes (3) large, narrowly separated beneath, more widely so on the front; antennae rather short. Pronotum tawny yellow, explanate margin a little paler, disk with a triangular fuscous spot which is broader anteriorly; margin coarsely punctate as usual, convex disk strongly granulose, median line impressed. Elytra dark fuscous, external margins and suture narrowly yellow; legs entirely yellow; fifth and following ventral segments of the male entirely yellow, stigma like pores very large and deep. Length 6 mm.

Lawrence, Kansas; 2 males.

This species has the rather short antennae and large eyes of dimissus and collustrans, with which it must be associated. The granulate pronotum is a unique character in our species; each granule bears a fine puncture at its summit.

Photinus stellaris n. sp.

Form narrow, parallel; eyes moderately large; antennae black. Prothorax very little wider than long, sides slightly to scarcely arcuate and parallel in about basal half, rather strongly rounded in front; flattened margin dull yellow, closely strongly punctate as usual; convex disk sparsely finely punctate and longitudinally impressed, varying in color from orange red to bright red, or more rarely slightly rosy, and entirely without darker spot, the coarsely punctured apical margin with an ill-defined transverse dusky spot which is sometimes longitudinally divided. Elytra entirely black without pale border, lateral margin very narrowly reflexed, surface subgranulato-rugulose as usual. Legs fuscous, the front and middle thighs paler; ventral segments 5–8 (3) entirely yellow. Length 6.5 to 9 mm.

Described from a series of nine examples, all &, collected by

Mr. O. C. Poling at Alpine, Texas.

This species is thus far unique in its unicolored elytra, all others having the sutural and lateral margins paler.

Photinus floridanus n. sp.

Closely related in form and color type to marginellus, of which it may be a southern race. The size is smaller than in marginellus, the color darker, pronotal fuscous stripe always entire, eyes of male smaller, the width of the front not much less than the vertical diameter of the eye. The third ventral of the male is often in part pale; the sixth in great part, and the seventh entirely, dark in the female. Length 5½ to 6½ mm.

In marginellus the pronotal fuscous vitta is usually abbreviated and often entirely lacking; the eyes in the male are larger, the width of the front much less than the vertical diameter of the eye; third ventral of male entirely dark, sixth and seventh ventrals of female typically pale, or as originally described by Le Conte, the abdomen in the female differs from the male only by the last abdominal segment.

Described from a series of eight examples collected by the writer at St. Petersburg and Dunedin, Florida. The type is a

male from St. Petersburg and bears date IV-9-'23.

Photuris flavicollis n. sp.

Of the same form as the other known species of the genus. Prothorax orange yellow, the explanate margins paler yellow;

head, scutellum, metasternum and femora yellow; antennae, elytra, tibiae and tarsi black. Margin of labrum triangulate; head broadly concave. Thorax moderately coarsely and densely punctate, the margins more finely so. Elytra entirely black, distinctly closely punctate, nearly as in *frontalis*. Fourth ventral segment posteriorly, and following segments entirely, yellow. Length 8.4 to 11.5 mm.

Alpine, Texas; three males, collected by O. C. Poling.

Flavicollis is of about the same size as frontalis; the thoracic punctuation is less coarse and less dense than in the latter but coarser than in pennsylvanica. The elytral pubescence is almost black, much darker than in the other species. The entirely black elytra are unique among our representatives of the genus.

NOTE ON THE VARIETIES OF CRIOCERIS ASPARAGI L.

By Melville H. Hatch, Seattle, Wash.1

The attention of students of the Nearctic Coleoptera is directed to a paper by Maurice Pic, "Sur Crioceris asparagi L. et ses variétés" (Bull. Soc. Ent. Fr., 1906, pp. 119–123) in which twelve common European color forms of our common asparagus beetles are diagnosed. Figures illustrative of most of these forms are given by Heyden (Wien. Ent. Zeit., XXV, 1906, pp. 123–126) and by Kuhnt (Ill. Best.-Tab. Käf. Deut., 1913, p. 818, fig. 81). Further information concerning their biology is given by Schuster (Wien. Ent. Zeit., XXVI, 1907, pp. 111–115) and bibliography is given in the Coleopterorum Catalogus, part 51, 1913, pp. 41–44.

In my material from southern Michigan I recognize, in addition to the typical form, the following: incrucifer Pic, quadripunctata Schust., linnei Pic, anticeconjuncta Pic, apiceconjuncta Pic, impupiliata Pic (= schusteri Heyd.). The pronotum may be either entirely red, or marked with a double discal spot. However, my only specimens with immaculate pronotum belong to linnei, and some, even of that form, have the pronotum maculate.

¹ Contribution from the Department of Zoölogy of the University of Minnesota.